

Exhibit R-1, RDT&E Programs

DEPARTMENT OF THE NAVY

Appropriation: RDT&E,N

Date: Jan 99

				<u>TOA, \$ in Millions</u>			
<u>R-1 Line</u> <u>Item No</u>	<u>Program</u> <u>Element</u> <u>Number</u>	<u>Item</u>	<u>Budget</u> <u>Activity</u>	<u>FY98</u> <u>Cost</u>	<u>FY99</u> <u>Cost</u>	<u>FY00</u> <u>Cost</u>	<u>FY01</u> <u>Cost</u>
(147)	0605867N (Tac Sat Recon Ofc)	Z1034	6	9.455	14.912	10.528	12.414
(147)	0605867N (Space Management Support)	R2007	6	.861	1.191	1.593	1.600
Total	0605867N			10.316	16.103	12.121	14.014

Exhibit R-2, RDT&E Budget Item Justification									Date: January 1999	
APPROPRIATION/BUDGET ACTIVITY RDT&E,N Activity 6					R-1 ITEM NOMENCLATURE Space and Electronic Warfare Surveillance/ Reconnaissance Support Program Element (PE) Name and No. 0605867					
COST (\$ in Millions)	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04	FY 05	Cost to Complete	Total Cost
Total PE Cost	10.316	16.103	12.121	14.014	14.256	14.600	14.919	15.446	CONT	CONT
Z1034 Tac Sat Recon Ofc	9.455	14.912	10.528	12.414	12.625	12.911	13.195	13.487	CONT	CONT
R2007 Space Management Support	.861	1.191	1.593	1.600	1.631	1.689	1.724	1.959	CONT	CONT
Project C Name/No. & subtotal cost										
Quantity of RDT&E Articles										
<p>(U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Established to exploit all National and Selected Service sensor systems to improve tactical support to fleet operational commanders. Project also supports fleet exercises, which provide the venue for testing modifications to existing programs and being made aware of new requirements. Additional detailed information is available at a higher level of classification.</p> <p>(U) Z1034: Established to exploit all National and Service sensor systems to improve tactical support to fleet operational commanders. Project also supports fleet exercises, which provide the venue for testing modifications to existing programs and being made aware of new requirements.</p> <p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>1. (U) FY 1998 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> • (U) (\$.284) Joint Exercises/Training • (U) (\$ 1.329) Support to Theater Ballistic Missile Defense • (U) (\$ 3.318) Support to Littoral/Expeditionary Warfare • (U) (\$ 3.576) Precision Strike/Mission Planning • (U) (\$.948) Improved Data Dissemination/Exploitation <p>2. (U) FY 1999 PLAN:</p> <ul style="list-style-type: none"> • (U) (\$.359) Joint Exercises/Training • (U) (\$ 1.798) Support to TBMD • (U) (\$ 4.196) Support to Littoral/Expeditionary Warfare • (U) (\$ 4.360) Precision Strike/Mission Planning • (U) (\$ 1.199) Improved Data Dissemination/Exploitation • (U) (\$ 3.000) Global C4ISR Visualization (GCIV) (Congressional Addition) 										

3. (U) FY 2000 PLAN:

- (U) (\$.320) Joint Exercises/Training
- (U) (\$1.601) Support to TBMD
- (U) (\$3.589) Support to Littoral/Expeditionary Warfare
- (U) (\$3.953) Precision Strike/Mission Planning
- (U) (\$1.065) Improved Data Dissemination/Exploitation

(U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides resources to the Naval Space Command (NAVSPACECOM) for the conduct of its support testing. NAVSPACECOM is tasked with providing space support to fleet units worldwide, while also planning and coordinating future support system analysis, requirements, architectural and feasibility studies, technical demonstrations and prototype system development for future concepts to provide space support to the fleet warfighter.

(U) R2007: The project provides resources to the Naval Space Command (NAVSPACECOM) for the conduct of its support testing.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 1998 ACCOMPLISHMENTS:

- (U) (\$.113) Demonstrated advanced processing techniques using RESIC/Hyper Spectral Imagery (HSI) data
- (U) (\$.150) Investigated targeting of specific emitters using National systems
- (U) (\$.200) Demonstrated application of new processing against orbit predictions
- (U) (\$.235) Applied parallel processing techniques to space processes
- (U) (\$.045) Completed MILSATCOM application research
- (U) (\$.118) Investigated Cooperative Engagement Capabilities integrated to Theater Ballistic Missile (TBM) information

2. (U) FY 1999 PLAN:

- (U) (\$.189) Prototype output interfaces for RESIC/HSI data
- (U) (\$.050) Develop low data rate SATCOM alternatives
- (U) (\$.150) Demonstrate real-time application of National systems data
- (U) (\$.200) Integrate TBM warning data into Joint Tactical Ground Stations environment
- (U) (\$.130) Demonstrate Kalman filtering against low orbit data
- (U) (\$.281) Investigate numerically intensive database applications in space control context

Exhibit R-2, RDT&E Budget Item Justification		Date: January 1999
	<ul style="list-style-type: none">• (U) (\$.168) Analyze the process used to resolve Uncorrelated Targets (UCTs) within the NAVSPACECOM mission system• (U) (\$.023) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.	
3.	(U) FY 2000 PLAN: <ul style="list-style-type: none">• (U) (\$.400) Develop Hyper Spectral Imagery production techniques• (U) (\$.381) Integrate JTACS into GCCS product delivery• (U) (\$.281) Demonstrate advanced processing on orbit analyst support• (U) (\$.181) Prototype Kalman Filtering against low orbit objects• (U) (\$.150) Study advanced space communications techniques• (U) (\$.200) Demonstrate National System data integration	
(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under Budget Activity 6 because it supports the operations and installations required for general research and development use.		
B. Program Change Summary: (U) Funding: R2007: FY 1998 adjustments are due to SBIR reduction (-30), and a Minor Adjustment (-1). FY1999 adjustments are due to Revised Economic Assumption (-3). FY2000 adjustments are for program adjustment (+400), and Navy Working Capital Fund Rates (NWCFF) (+3), Civilian Pay Rates (+1) and Non Pay Inflation (-23). Z1034: FY99 adjustments (-28) Economic Assumptions, (-10) Civilian Personnel Underexecution, (-41) FFRDC Distribution . FY2000 adjustments (-1.580) due to PY expenditure carryover (+13) Civilian Pay Rates, (-152) Non Pay Inflation, (-2) Working Capital.		
C. Other Program Funding Summary N/A		